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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,569	06/29/2001	Kazuhiro Machiguchi	2185-0549P	5136

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EXAMINER

WALKE, AMANDA C

ART UNIT PAPER NUMBER

1752

DATE MAILED: 08/01/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/893,569

Examiner

Amanda C Walke

Applicant(s)

MACHIGUCHI ET AL.

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-- The MAILING DATE of this communication appears n the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 1-3 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-14 is/are allowed.
- 6) ☒ Claim(s) 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5 and 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Claims 1-3 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected color filter array, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 9.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koshiha et al (4,963,463).

Koshiha et al disclose a radiation sensitive resin composition comprising a quinonediazide resin and a compound which generates an acid upon irradiation (column 2, lines 10-26). The resin may also comprise a dye, pigment, or adhesion promoter. Among the compounds listed as examples of these three types of additives is the dye Solvent Yellow 162, which is named by the present specification as a preferred example of the presently claimed

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pyridone azo dye and has a maximum absorption wavelength of 400 to 500 nm, therefore the dye meets the limitations of the present claim 3(column 6, line 59 to column 7, line 6).

Given the teachings of the reference, it would have been obvious to one of ordinary skill in the art to prepare the material of Koshiba et al. choosing to add Solvent Yellow 162 dye, with reasonable expectation of achieving a resist suitable for dry development which provides high resolution and selectivity (column 2, lines 4-9).

With respect to the limitation that the dye "enables to produce a red filter layer having a transmittance of 5 % or less at 450 nm," the instant specification teaches that the claimed transmittance may be achieved by adding a certain specific amount of the pyridone azo dye (present dye III) based upon the amounts of the present dye I and dye II which are present in the filter layer with dye III. The examiner notes that this simply requires that the pyridone azo dye be *capable* of being combined with dyes I and II to make a color filter layer.

Given that the dye of the reference, Solvent Yellow 162, meets the limitations for the presently claimed pyridone azo dye, and is actually a dye preferred by the instant invention, it is the position of the examiner that the dye of Koshiba et al is capable of being combined with dyes I and II to make a red filter layer, thus meeting the limitations of the present claim 4.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

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provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claim 4 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 is of copending Application No. 09/893551. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claim of the co-pending application claims a photosensitive resin comprising a pyridone azo dye having its absorption maximum at a wavelength of 400-500 nm. With respect to the limitation that the dye "enables to produce a red filter layer having a transmittance of 5 % or less at 450 nm," as discussed above, the instant specification teaches that the claimed transmittance may be achieved by adding a certain specific amount of the pyridone azo dye (present dye III) based upon the amounts of the present dye I and dye II which are present in the filter layer with dye III. The examiner notes that this simply requires that the pyridone azo dye be *capable* of being combined with dyes I and II to make a color filter layer.

While the claim of 09/893551 does not recite a limitation regarding the specific transmittance as the instant claim 4 does, given that the photosensitive resin comprising a pyridone azo dye having a maximum absorption wavelength of 400-500 nm meets the limitations for the presently claimed pyridone azo dye, it is the position of the examiner that one of ordinary skill in the art would have recognized that the dye of claim 3 of 09/893551 is capable of being combined with dyes I and II to make a red filter layer, thus meeting the limitations of the present claim 4.

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This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Allowable Subject Matter

7. Claims 5-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to teach or suggest to one of ordinary skill in the art to prepare a photosensitive resin comprising a xanthene dye having its absorption maximum at a wavelength of 500 to 600 nm and a pirazolone azo dye having its absorption maximum at a wavelength of 400-550 nm.

The examiner performed a search of the relevant prior art, had a structure search performed by a PTO staff member, and considered the art cited as relevant in the European search report (all were "A" references), but none of the references found during the searches obviated or anticipated the present claims 5-14.

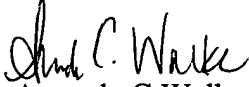
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda C Walke whose telephone number is 703-305-0407.

The examiner can normally be reached on M-R 5:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Baxter can be reached on 703-308-2303. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Amanda C Walke
Examiner
Art Unit 1752

ACW
July 29, 2003